

Table CT6. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2016, Iowa

Year	Coal	Natural Gas ^a	Petroleum						Hydro-electric Power ^{e,f}	Biomass		Geo-thermal ^f	Solar ^{f,i}	Retail Electricity Sales	Net Energy ^{f,j}	Electrical System Energy Losses ^k	Total ^{f,j}
			Distillate Fuel Oil	HGL ^b	Motor Gasoline ^c	Residual Fuel Oil	Other ^d	Total		Wood and Waste ^{f,g}	Losses and Co-products ^h						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Million kWh							
1960	2,193	43	5,536	1,098	5,797	573	3,011	16,016	2	--	--	--	NA	2,676	--	--	--
1965	2,464	68	5,607	1,815	5,373	354	3,471	16,620	2	--	--	--	NA	3,719	--	--	--
1970	1,955	99	5,884	2,949	5,391	261	3,913	18,398	1	--	--	--	NA	5,338	--	--	--
1975	1,333	121	4,670	5,593	3,791	279	3,130	17,463	1	--	--	--	NA	6,626	--	--	--
1980	1,505	115	4,698	6,557	2,612	273	3,047	17,187	1	--	--	--	NA	9,318	--	--	--
1985	1,572	87	4,971	4,893	1,703	179	2,729	14,475	1	--	--	--	NA	9,520	--	--	--
1990	2,353	90	4,807	3,087	1,072	94	2,046	11,105	0	--	--	--	0	11,392	--	--	--
1995	2,761	113	5,636	12,267	1,038	92	2,228	21,260	0	--	--	--	0	13,771	--	--	--
1996	3,085	114	6,247	4,986	1,105	93	2,696	15,128	0	--	--	--	0	14,789	--	--	--
1997	3,103	107	6,475	4,399	1,092	71	3,276	15,314	0	--	--	--	0	15,531	--	--	--
1998	2,832	105	6,572	9,946	900	88	2,962	20,468	0	--	--	--	0	16,079	--	--	--
1999	2,995	101	5,915	12,589	879	100	3,868	23,352	0	--	--	--	0	16,499	--	--	--
2000	2,902	100	6,027	13,368	784	140	3,232	23,551	0	--	--	--	0	17,127	--	--	--
2001	2,814	93	6,813	12,031	1,201	43	2,435	22,524	0	--	--	--	0	16,238	--	--	--
2002	2,860	92	6,209	13,111	1,265	60	2,922	23,567	0	--	--	--	0	16,548	--	--	--
2003	2,898	94	4,722	7,859	1,323	150	2,756	16,810	0	--	--	--	0	16,803	--	--	--
2004	2,925	94	4,571	14,128	1,698	282	3,426	24,105	0	--	--	--	0	17,437	--	--	--
2005	2,930	96	4,550	15,814	1,568	191	3,617	25,740	0	--	--	--	0	17,915	--	--	--
2006	3,067	101	4,418	16,355	1,702	44	3,061	25,580	0	--	--	--	0	18,331	--	--	--
2007	3,009	141	4,683	11,945	1,394	44	2,538	20,604	0	--	--	--	0	19,125	--	--	--
2008	2,904	162	5,633	13,971	1,102	170	2,531	23,407	0	--	--	--	0	19,237	--	--	--
2009	2,682	165	5,544	14,638	1,152	66	2,192	23,591	0	--	--	--	0	18,211	--	--	--
2010	3,348	167	6,119	14,577	1,320	20	R 1,773	R 23,809	0	--	--	--	(s)	18,865	--	--	--
2011	3,542	167	5,949	13,863	1,355	32	R 1,685	22,884	0	--	--	--	(s)	19,240	--	--	--
2012	3,345	169	6,290	11,237	985	8	R 1,977	20,497	0	--	--	--	(s)	19,512	--	--	--
2013	3,433	174	6,181	15,502	970	6	R 2,763	25,423	0	--	--	--	(s)	19,635	--	--	--
2014	3,094	172	6,643	15,621	772	6	R 2,726	25,768	0	--	--	--	1	20,436	--	--	--
2015	2,849	179	7,657	14,491	R 748	0	R 2,427	25,324	0	--	--	--	1	21,289	--	--	--
2016	2,485	190	7,912	14,546	875	0	2,557	25,890	0	--	--	--	3	22,046	--	--	--
Trillion Btu																	
1960	51.7	44.9	32.2	4.6	30.5	3.6	19.6	90.5	(s)	2.8	NA	NA	NA	9.1	199.0	22.6	221.6
1965	57.5	68.9	32.7	7.5	28.2	2.2	22.0	92.7	(s)	2.9	NA	NA	NA	12.7	234.7	30.3	265.0
1970	43.0	99.9	34.3	11.0	28.3	1.6	24.8	100.1	(s)	3.9	NA	NA	NA	18.2	265.0	44.1	309.1
1975	28.4	122.5	27.2	20.4	19.9	1.8	19.9	89.1	(s)	5.1	NA	NA	NA	22.6	267.7	54.2	322.0
1980	32.4	114.9	27.4	23.8	13.7	1.7	18.9	85.5	(s)	37.8	NA	NA	NA	31.8	302.4	76.4	378.8
1985	35.6	88.0	29.0	17.4	8.9	1.1	17.4	73.8	(s)	44.3	4.6	NA	NA	32.5	264.1	74.4	338.5
1990	53.1	90.9	28.0	11.0	5.6	0.6	13.1	58.3	0.0	39.9	14.0	0.0	0.0	38.9	274.4	96.2	370.6
1995	57.9	113.5	32.8	43.8	5.4	0.6	14.2	96.8	0.0	33.1	26.7	0.0	0.0	47.0	351.5	115.0	466.6
1996	65.7	114.4	36.4	17.7	5.8	0.6	17.2	77.7	0.0	40.2	26.5	0.0	0.0	50.5	352.7	123.9	476.7
1997	65.0	108.1	37.7	15.7	5.7	0.4	21.1	80.6	0.0	32.0	26.3	0.0	0.0	53.0	343.6	128.9	472.5
1998	60.0	106.5	38.2	35.4	4.7	0.6	18.8	97.7	0.0	30.9	26.1	0.0	0.0	54.9	352.5	135.8	488.3
1999	63.4	103.3	34.4	44.7	4.6	0.6	24.7	109.0	0.0	31.3	27.0	0.0	0.0	56.3	375.0	140.2	515.2
2000	60.9	100.6	35.1	47.3	4.1	0.9	20.7	108.0	0.0	24.9	26.9	0.0	0.0	58.4	366.0	144.7	510.7
2001	59.1	92.9	39.6	42.6	6.3	0.3	15.7	104.5	0.0	20.9	26.8	0.0	0.0	55.4	345.9	136.3	482.2
2002	58.5	92.5	36.1	46.5	6.6	0.4	18.9	108.5	0.0	23.8	26.7	0.0	0.0	56.5	352.3	135.4	487.8
2003	60.2	94.1	27.5	28.0	6.9	0.9	17.9	81.2	0.0	23.0	35.8	0.0	0.0	57.3	337.5	137.0	474.4
2004	59.2	94.2	26.6	50.2	8.8	1.8	22.4	109.8	0.0	22.8	50.7	0.0	0.0	59.5	383.4	146.5	529.9
2005	59.1	96.6	26.5	56.2	8.2	1.2	23.6	115.6	0.0	24.1	64.0	0.0	0.0	61.1	407.2	144.9	552.0
2006	60.8	102.3	25.6	58.0	8.8	0.3	19.9	112.6	0.0	14.4	86.0	0.0	0.0	62.5	423.4	149.3	572.6
2007	60.8	142.3	27.1	42.1	7.2	0.3	16.4	93.1	0.0	16.3	110.4	0.0	0.0	65.3	472.1	151.8	623.9
2008	57.5	164.1	32.6	49.0	5.6	1.1	16.4	104.7	0.0	16.3	131.1	0.0	0.0	65.6	522.7	150.9	673.7
2009	52.6	165.7	32.0	50.7	5.9	0.4	14.2	103.3	0.0	18.4	171.0	0.0	0.0	62.1	554.8	143.6	698.4
2010	66.0	168.4	35.3	49.2	6.7	0.1	R 11.4	R 102.7	0.0	R 19.5	199.0	0.0	(s)	64.4	R 600.9	146.5	R 747.5
2011	70.3	168.7	34.3	46.4	6.9	0.2	R 10.8	R 98.7	0.0	R 11.2	198.5	0.0	(s)	65.6	R 595.0	149.1	R 744.1
2012	63.6	171.2	36.3	38.0	5.0	0.1	R 12.8	R 92.2	0.0	R 10.2	186.4	0.0	(s)	66.6	R 570.5	147.3	R 717.9
2013	64.3	178.6	35.7	52.6	4.9	(s)	R 17.1	R 110.4	0.0	R 10.7	195.1	0.0	(s)	67.0	R 610.1	148.0	R 758.0
2014	58.7	179.0	38.3	53.1	3.9	(s)	R 16.8	R 112.2	0.0	R 13.5	203.9	0.0	(s)	69.7	R 620.0	151.6	R 771.6
2015	52.5	188.2	44.2	48.8	3.8	0.0	R 15.1	R 111.8	0.0	R 12.8	200.5	0.0	(s)	72.6	R 620.0	152.1	R 772.1
2016	45.4	200.2	45.6	49.0	4.4	0.0	16.0	115.0	0.0	12.5	207.7	0.0	(s)	75.2	637.5	156.2	793.7

^a Natural gas as it is consumed; includes supplemental gaseous fuels that are commingled with natural gas.

^b Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.

^c Beginning in 1993, includes fuel ethanol blended into motor gasoline. There is a discontinuity in this time series between 2014 and 2015 because of coverage. See Technical Notes, Section 4.

^d Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See Technical Notes, Section 4.

^e Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^g Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.

^h Losses and co-products from the production of fuel ethanol.

ⁱ Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.

^j For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column. Beginning in 2009, includes a small amount of wind energy consumed by industrial utility-scale facilities. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

^k Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.

kWh = Kilowatthours. -- = Not applicable. NA = Not available.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.